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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,416	10/15/2003	David T. Fulton	9400-52	7295

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EXAMINER	
MANSFIELD, THOMAS L	

ART UNIT	PAPER NUMBER
3623	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/686,416	FULTON ET AL.	
	Examiner	Art Unit	
	THOMAS MANSFIELD	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Final Office action is in reply to the Amendment and Response to Official Action filed on 3 June 2008.

2. Claims 1-30 have been amended.

3. Claims 1-30 are currently pending and have been examined.

Response to Amendment

4. Claims 18-28 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Applicants have amended Claims 18-28 to properly recite statutory subject matter and the rejection is withdrawn.

Response to Arguments

5. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, 5-12, 15-19, and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (Collins) (U.S. 5,623,404) in view of Ferriter (U.S. 5,212,635).

With regard to Claims 1, 11, 18, 25, 29, and 30, Collins teaches *a computer-based method, system and computer-product* (A/S system **12**) *of evaluating* (evaluates) *performance* (portion of an objective function) *of a service technician* (service technician) *who performs multiple service dispatches* (service calls) (see at least column 5, lines 4-47)*, comprising*:

- *decomposing* a *service dispatch* (service call) into *a series of tasks* (service activity associated with each of the calls) (see at least column 5, lines 35-46).
- *determining planned times* (assigns a start time) *for tasks in the series* (see at least column 5, lines 48-59).
- *comparing, in a computer system*, *a service technician's actual times to perform the series of tasks* (monitor the actual durations of the service calls) *to the planned times* (expected, pessimistic, and optimistic schedules) *for the series of tasks* (see at least column 14, lines 36-60).

Collins does not specifically teach *generating, in the computer system an evaluation of the service technician's performance efficiency based on the comparing*. Ferriter teaches *generating, in the computer system an evaluation of the service technician's performance efficiency based on the comparing* in analogous art of manufacturing technician efficiency for the purposes of, "automatically measure his or her efficiency against a predetermined labor standard time" (see at least column 6, lines 26-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the manufacturing technician efficiency method as taught by Ferriter with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of enhancing a worker's productivity efficiency for overall work performance evaluation (Ferriter, column 6, lines 29-36).

With regards to Claims 2, 12, and 19, Collins teaches *wherein the service dispatch is performed at a customer premises* (customer location) *and wherein at least some of the tasks comprise driving to the customer premises* (initial travel time) *and driving from the customer premises* (travel time to the completion) (see at least column 5, lines 48-65).

With regard to Claims 5, 15, and 22, Collins teaches *wherein the determining planned times for tasks in the series comprises determining planned times based on whether the tasks are being performed in a rural, suburban or urban location* (postal zip code centroid information) (see at least column 6, lines 5-7).

With regard to Claims 6, 16, and 23, Collins teaches *wherein the decomposing a service dispatch into a series of tasks comprises decomposing a service dispatch into a series of daily, job-based fixed and job-based variable tasks* (expected and pessimistic durations, fixed duration, variability information) (see at least column 7, lines 22-67).

With regard to Claims 7 and 26, Collins teaches *wherein the generating an evaluation comprises generating a comparison of total actual time* (time segment) *worked in a day* (end of the segment, as well as the end of the work day)*, compared to total planned time for the day* (time segment corresponding to the work day)*, based on service dispatches* (schedule of service calls) *for the day* (see at least column 16, lines 15-48).

With regard to Claims 8 and 27, Collins teaches *generating, in the computer system, a comparison of total number of demand service dispatches* (service calls) *completed in a day* (pessimistic duration, pessimistic completion time)*, compared to total number of demand service dispatches* (service calls assigned to a service technician) *for the day* (length of an entire work day) (see at least column 16, lines 15-65).

With regard to Claims 9 and 28, Collins teaches *generating, in the computer system, an evaluation of the service technician's revision rate based upon a number of service dispatches that are not completed successfully on a first visit* (recalculating the aggregate duration up to each of the uncompleted service calls) (see at least column 15, lines 28-42).

With regard to Claim 10, Collins teaches:

- *comparing the service technician's actual times* (time segments) *to perform the series of tasks in a given day* (entire day) *to the planned times for the series of tasks* (see at least column 16, lines 15-30 and Figure 2).
- *wherein the generating comprises generating an evaluation of the service technician's performance* (useful for managing and predicting technician performance) *for the given day based upon the comparing* (see at least column 6, lines 58-65).

Collins does not specifically teach *providing the evaluation to a supervisor of the service technician at a beginning of a business day that immediately follows the given day*. Ferriter teaches providing the evaluation to a supervisor (recorded or reported to a system wide control) of the service technician at a beginning of a business day that immediately follows the given day in analogous art of manufacturing technician efficiency for the purposes of, “determine which manufacturing technicians require additional training or which technicians are particularly skilled at selected operations" (see at least column 6, lines 30-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the manufacturing technician efficiency method as taught by Ferriter with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of further enhancing a technician’s job performance skills or revealing specific skills of technicians for effective management.

With regard to Claims 17 and 24, Collins teaches wherein the comparing is performed daily based on the service technician's actual times to perform series of tasks for a previous business day (effectively overrides the previously assigned pessimistic completion time) (see at least column 16, line 49 through column 17, line 4).

8. Claims 3, 4, 13, 14, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins and Ferriter as applied to Claims 1, 2, 5-12, 15-19, and 22-30 above, and in further view of Kmack et al. (Kmack) (U.S. 6,304,851).

With regard to Claims 3, 13, and 20, Collins in view of Ferriter teach the method and system of Claims 1, 2, 5-12, 15-19, and 22-30 above. However, Collins and Ferriter do not specifically teach *wherein actual times for driving to the customer premises and driving from the customer premises are determined based on data that is generated from a vehicle that is driven by the service technician*. Kmack teaches *wherein actual times for driving to the customer premises and driving from the customer premises are determined based on data that is generated from a vehicle* (global positioning systems) *that is driven by the service technician* in analogous art of mobile data collection for the purposes of, "record data and information associated with activities performed by a worker **20** utilizing the portable computing device **10**" (see at least column 8, lines 11-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the mobile data collection method as taught by Kmack with the scheduling resource requests method of Collins and the manufacturing technician efficiency method of Ferriter. One of ordinary skill in the art would have been motivated to do so for the benefit of having a device that can perform multiple data recording features associated with a time and motion study for accurate analysis or audit purposes (Kmack, column 8, lines 11-39).

With regard to Claims 4, 14, and 21, Collins and Ferriter do not specifically teach *wherein the service technician begins daily dispatches from a service center and ends daily dispatches at the service center and wherein at least some of the tasks comprise performing beginning of day tasks at the service center and performing end of day tasks at the service center*. Kmack teaches *wherein the service technician begins daily dispatches from a service center* (Morning Preparation, Stocking) (see at least column 15, line 45 through column 16, line 9 and FIG.'s 14 and 15) *and ends daily* (end day) (see at least column 16, lines 35-59) *dispatches at the service center and wherein at least some of the tasks comprise performing beginning of day tasks* (first activity, Morning Preparation) (see at least FIG. 14) *at the service center and performing end of*

day tasks at the service center (Communicate w/Manager, Aside Trash) (see at least FIG. 17) in analogous art of mobile data collection for the purposes of, "The time and motion study reports may subsequently be used to identify a change in the work process of the beverage industry operation to improve how they service POP outlets" (see at least column 18, lines 10-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the mobile data collection method as taught by Kmack with the scheduling resource requests method of Collins and the manufacturing technician efficiency method of Ferriter. One of ordinary skill in the art would have been motivated to do so for the benefit of differentiating non-driving related tasks and associated times from actual outlet delivery related tasks and associated times for specific activity identification (Kmack, see FIG's. 14, 15, 17 and column 15, line 61 through column 16, line 67).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Barbiaux et al (U.S. 4,804,937) discloses a vehicle monitoring arrangement and system.
- Apsell (U.S. 6,651,001) discloses a method and system and apparatus for integrating maintenance vehicle and service personnel tracking information.
- Hill, "The Development of Job Performance Criteria for Textile Factory Technicians", Bell and Howell Information and Learning Company, UMI Number: 9954456, 2000, discloses comparisons of technician performance with respect to task and time proficiency.
- Patton et al., "Service Management: Principles and Practices", Instrument Society of America, 3rd edition, 1994, discloses aspects of field service performance of technicians including differentiation for actual time while on-site and drive time with problem-solving efficiency.
- DiSylvester, "Productivity Measurements for the Technician", Manage, Vol. 31, Iss. 2, pg. 12, April 1979, discloses in the abstract a feasibility study in the step of a technician's job performance process.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS MANSFIELD whose telephone number is (571)270-1904. The examiner can normally be reached on Monday-Thursday 8:30 am-6 pm, alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren Boswell can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

4 September 2008
Thomas Mansfield

/Scott L Jarrett/
Primary Examiner, Art Unit 3623